

# **EXHIBIT 3**

Supplemental Expert Report of Jose Zagal

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF ILLINOIS

CATHERINE ALEXANDER,

Plaintiff,

v.

TAKE-TWO INTERACTIVE SOFTWARE, INC.; )  
2K GAMES, INC.; 2K SPORTS INC.; )  
WORLD WRESTLING ENTERTAINMENT, )  
INC.; VISUAL CONCEPTS ENTERTAINMENT; )  
YUKE'S CO., LTD.; and YUKE'S LA INC., )

Defendants. )

Case No: 3:18-cv-0966-MJR-DGW

**SUPPLEMENTAL EXPERT REPORT OF JOSE ZAGAL  
ON BEHALF OF CATHERINE ALEXANDER**

## **I. BACKGROUND AND QUALIFICATIONS**

I am a game designer and scholar. I am also an Associate Professor with the University of Utah's nationally ranked Entertainment Arts & Engineering program where, among other things, I teach courses on videogame development, design and analysis. For further details on my background and qualifications, please refer to the Opening Expert Report I submitted on behalf of Plaintiff Catherine Alexander on November 15, 2018. I provide this Supplemental Report to expand upon my previous opinions in light of new documents that have been provided to me by counsel including those listed at Appendix A.

## **II. DEFENDANTS COPIED AND REPRODUCED TATTOOS FOR THE WWE VIDEO GAMES**

I understand that Take-Two Interactive Software, Inc., 2K Games, Inc., and 2K Sports, Inc., branded and licensed content for the WWE 2K Games and Visual Concepts Entertainment developed and licensed content for the WWE 2K Video Games. Take-Two, 2K Games, 2K Sports, and Visual Concepts (collectively "Take-Two") produced documents that are consistent with a successful effort to copy Randy Orton's tattoos for use in the WWE 2K Games.

In my experience there are three broad techniques commonly used in the industry to copy someone's physical appearance (including tattoos) in order to have them appear in a videogame. One option is for an artist to recreate these from scratch. In the same way that a painter may paint someone's portrait using canvas, brushes, paint, and perhaps a reference or a live model, a 3D artist can paint a 3D model in the computer such that it looks like the person. This method can be time consuming and, depending on the skills of the individual artist, may not produce an in-game representation with a high degree of verisimilitude to the original subject. Another option is to use a few high resolution photographs of the subject and manipulate these directly (scaling/resizing, masking, cropping, rotating, etc.) in the computer using specialized software to create a texture that can then be wrapped on a 3D model. This technique is well-known and there are even demonstrations of it available online (e.g. "Creating Face Texture Using real images in Photoshop Part 1" by *dreamyartworld*, <https://www.youtube.com/watch?v=QIJ0IWzSI-U>). A third method is for the original model to pose at a specially instrumented studio that is equipped with a variety of cameras. These cameras, positioned around the subject, quickly take pictures from a variety of angles. The pictures are then aligned and assembled using specialized software (with some systems this process is automated). This process is often also called a 3D scan. Again, there are examples of this process publicly available online (e.g. "3D Scan and Retopology for Production" by *The Gnomon Workshop*, <https://youtu.be/0kt0cTRApzg?t=34>). While the specific systems, their configuration, and tools used may vary from year to year, and from studio to studio, the general techniques used to copy a subject's appearance, including tattoos, remains largely the same.

These last two methods (use photos and 3D scan) can be used to create textures for in-game use with a high degree of verisimilitude to the original subject. For both of these methods, it is also common that an artist would perform additional work to prepare the images for use in a game. This additional work often includes touching up the images (e.g. clean up distortions, blemishes) and optimizing/compressing them such that they make more efficient use of computer resources (e.g. use less memory, align to certain dimensions and or file sizes, etc.). It is also at this stage that

certain features present in the original actor could be changed or removed – for example, moles, pimples, wrinkles, tattoos and more could be (and often are) digitally removed or new features could be added (e.g. scars, fantastical features).

It appears that the method that Take-Two used to copy the tattoos into the WWE Video Games was of the second or third kind I described earlier. This is because it appears that Take-Two obtained multiple high-quality photographs of Randy Orton's tattoos taken from different angles. See, e.g., TAKE-TWO\_0000909-929. Then, it appears Take-Two used specialized software to create textures from their high-quality photographs (See, e.g., TAKE-TWO\_0000956-957 and TAKE-TWO\_0000798-822). These textures appear to have been cleaned up and post-processed to be game-ready, which may have included cleaning up artifacts, normalizing color values with other textures in the game, and optimizing and compressing to use less memory. Such final textures appear to have been utilized in the WWE 2K Games after being stitched together to generate a skin usable by the digital 3D game model of Randy Orton (or other characters).

Accordingly, it appears to me, from at least the documents provided by Take-Two, that Take-Two followed one of the methods I outlined above for copying Randy Orton's tattoos and reproducing them into a usable game-ready character in the WWE Video Games. This is copying, and successful copying at that. Take-Two, consistent with Take-Two's desire for verisimilitude and realism, copied and reproduced the tattoo works from Randy Orton directly into the WWE Video Games. Consider that Take-Two announced in a press release that its WWE Video Games' attempt to achieve verisimilitude are ongoing with each new release. Specifically, the WWE 2K18 video game apparently contained a "brand new graphics engine that delivers...more realistic skin" for the video game characters (see TAKE-TWO\_0000082-87).

I also understand that the WWE Video Game franchise has been successful. Total units sold of the WWE 2K16, 2K17 and 2K18 games was about 10,143,602, which generated gross sales revenues of about \$418,692,526.00 (see TAKE-TWO\_0001332). In my opinion, a portion of the success, sales, and profits, of the WWE Video Games is attributable to the copying and reproduction of Randy Orton's tattoos.

### III. CONCLUSION

As I discussed in my Opening Report, a realistic portrayal of Randy Orton is important to the success and sales of WWE Video Games. WWE video game developers attempt to achieve verisimilitude with the Randy Orton video game character, in part, by copying and reproducing his tattoos. It is my understanding that tattoos are entitled to copyright protection. Take-Two copied tattoos from Randy Orton's body and reproduced them into the WWE Video Games. A portion of the success, sales, and profits, of the WWE Video Games are therefore attributable to these copyrighted tattoos.

**IV. SIGNATURE**

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

\_\_\_\_\_  
Jose P. Zagal

\_\_\_\_\_  
Date

2/4/19

**SUPPLEMENTAL EXPERT REPORT OF JOSE ZAGAL ON BEHALF OF  
CATHERINE ALEXANDER**

**EXHIBIT A**

**Documents Relied on by Jose Zagal**

<b>Beg Bates</b>	<b>End Bates</b>
TAKE-TWO_0000082	
TAKE-TWO_0000165	
TAKE-TWO_0000169	
TAKE-TWO_0000183	
TAKE-TWO_0000560	TAKE-TWO_0000609
TAKE-TWO_0000610	TAKE-TWO_0000618
TAKE-TWO_0000619	TAKE-TWO_0000620
TAKE-TWO_0000621	TAKE-TWO_0000630
TAKE-TWO_0000631	TAKE-TWO_0000633
TAKE-TWO_0000634	TAKE-TWO_0000635
TAKE-TWO_0000636	TAKE-TWO_0000668
TAKE-TWO_0000669	TAKE-TWO_0000678
TAKE-TWO_0000679	TAKE-TWO_0000680
TAKE-TWO_0000681	TAKE-TWO_0000699
TAKE-TWO_0000700	TAKE-TWO_0000705
TAKE-TWO_0000706	TAKE-TWO_0000734
TAKE-TWO_0000735	TAKE-TWO_0000736
TAKE-TWO_0000737	TAKE-TWO_0000761
TAKE-TWO_0000762	TAKE-TWO_0000782
TAKE-TWO_0000783	TAKE-TWO_0000784
TAKE-TWO_0000798	
TAKE-TWO_0000801	
TAKE-TWO_0000802	
TAKE-TWO_0000803	
TAKE-TWO_0000812	
TAKE-TWO_0000813	
TAKE-TWO_0000814	
TAKE-TWO_0000822	
TAKE-TWO_0000823	
TAKE-TWO_0000909	
TAKE-TWO_0000910	
TAKE-TWO_0000911	
TAKE-TWO_0000912	
TAKE-TWO_0000913	



<b>Beg Bates</b>	<b>End Bates</b>
TAKE-TWO_0000914	
TAKE-TWO_0000915	
TAKE-TWO_0000916	
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TAKE-TWO_0000973	
TAKE-TWO_0000976	
TAKE-TWO_0000977	
TAKE-TWO_0001332	